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**United States Patent** [19]

DiSanto et al.

[11] **Patent Number:** 5,302,235[45] **Date of Patent:** \* Apr. 12, 1994[54] **DUAL ANODE FLAT PANEL  
ELECTROPHORETIC DISPLAY  
APPARATUS**[75] **Inventors:** Frank J. DiSanto, North Hills; Denis  
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N.Y.[73] **Assignee:** Copytele, Inc., Huntington Station,  
N.Y.[\*] **Notice:** The portion of the term of this patent  
subsequent to Oct. 1, 2008 has been  
disclaimed.[21] **Appl. No.:** 719,021[22] **Filed:** Jun. 21, 1991**Related U.S. Application Data**[63] Continuation-in-part of Ser. No. 345,825, May 1, 1989,  
Pat. No. 5,053,763.[51] **Int. Cl.<sup>5</sup>** ..... G09G 3/34[52] **U.S. Cl.** ..... 156/643; 156/655;  
156/656[58] **Field of Search** ..... 156/656, 643, 655;  
359/296; 340/787[56] **References Cited****U.S. PATENT DOCUMENTS**

5,053,763 10/1991 DiSanto et al. .... 359/296 X

*Primary Examiner*—Thi Dang*Attorney, Agent, or Firm*—Arthur L. Plevy[57] **ABSTRACT**

An electrophoretic display has a grid cathode matrix arrangement consisting of a first plurality of parallel conductive lines insulated from a second plurality of parallel conductive lines transverse to said first plurality. Located with respect to the grid and cathode lines are first and second anode structures. The first anode is remote from the second with the second anode overlying the grid lines of the display and insulated therefrom. The second anode is biased to implement typical HOLD and ERASE modes independent of the first anode.

7 Claims, 1 Drawing Sheet

